A Task-Centered Instructional Strategy

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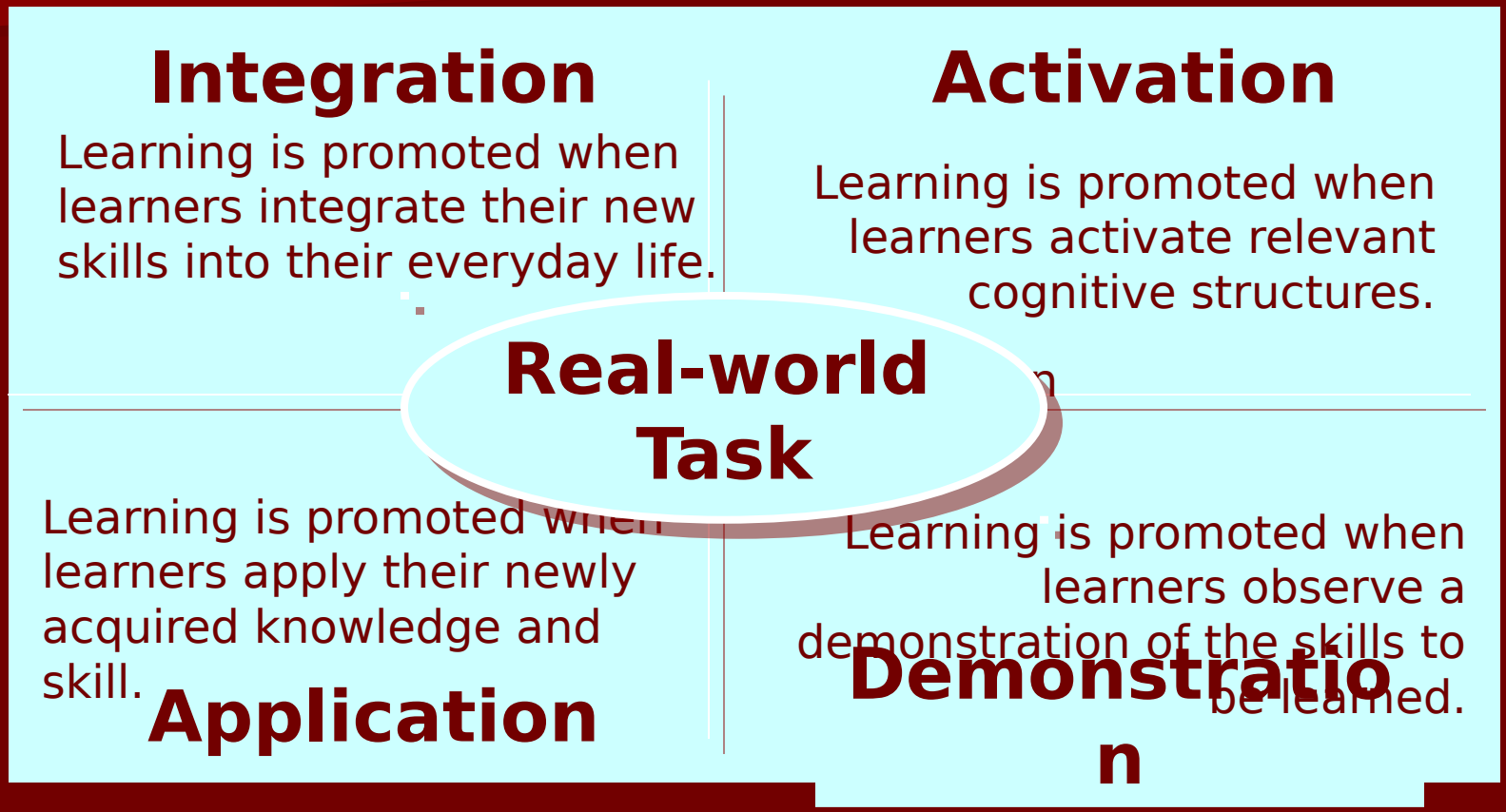
next

Overview of Presentation

- Fundamental Principles for Effective Instruction
- A content-first approach to instructional design
- A straightforward approach to cognitive task-analysis
- A task-centered instructional strategy

An approach in support of
Guided experiential Learning GEL - Clark
4C-ID Model – van Merriënboer

First Principles of Instruction


Integration
Learning is promoted when learners integrate their new skills into their everyday life.
Activation
Learning is promoted when learners activate relevant cognitive structures.
Real-world Task
Application
Learning is promoted when learners apply their newly acquired knowledge and skill.
Demonstration
Learning is promoted when learners observe a demonstration of the skills to be learned.

Developing task-centered instruction

Identify whole task

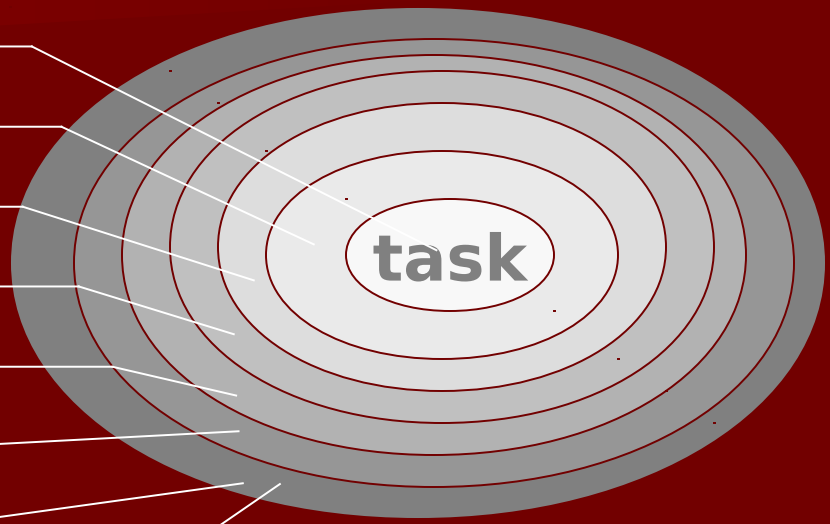
Identify task components

Analyze component skills

Design instructional strategy

Develop instruction

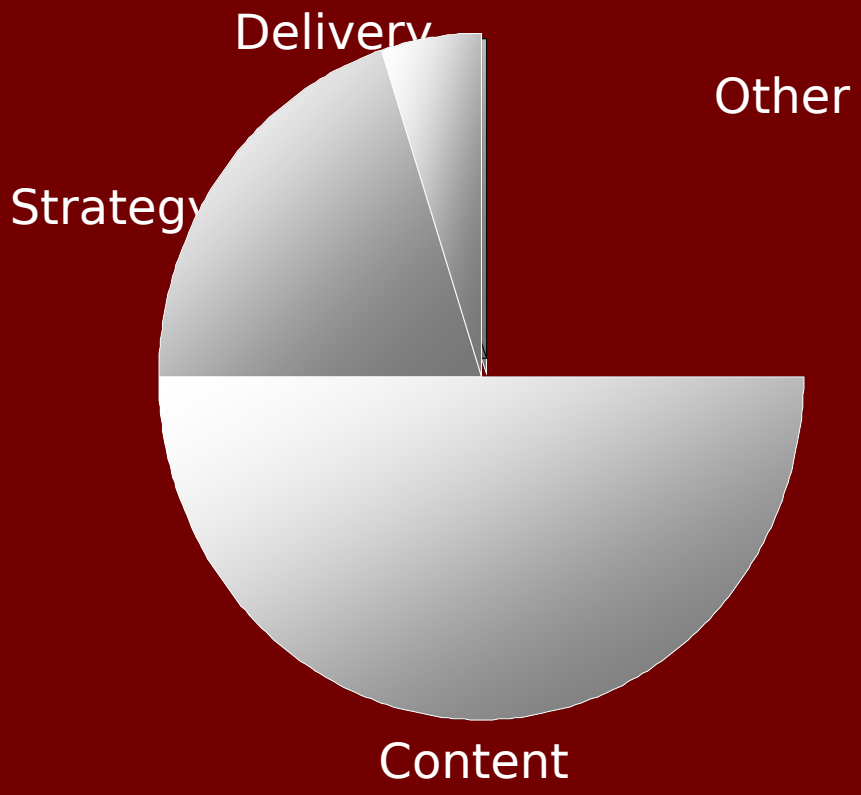
Evaluate instructional design



A Pebble-in-the-pond instructional development model

Relative contribution to learning

- Delivery
  - On-line
  - CD ROM
- Instructional Strategies
  - Presentation
  - Demonstration
  - Practice
  - Application
- Instructional Content
  - Content Selection
  - Content Sequence
  - Content Structure



General or Specific

General content is:

- INFORMATION
  or Generality
- Information is Inclusive
- Information refers to many cases or situations

Specific content is:

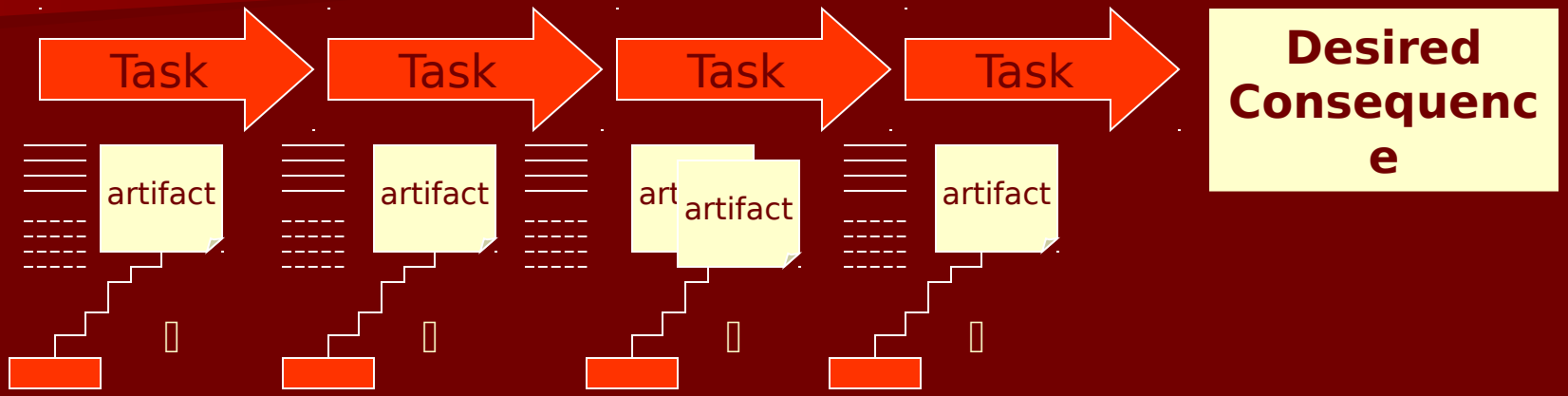
- PORTRAYAL
  or Instance
- Portrayal is Limited
- Portrayal refers to one case or a single situation

Knowledge Components

	Remember Information (General)	Apply information to Portrayal (Specific)
Information about	facts or associations	
Parts of	names and description	find location
Kinds of	definition	classify examples
How to	steps and sequence	perform task
What happens	process (conditions and consequences)	predict consequences or find conditions

Knowledge object for a whole-task

Portrayal shown in yellow
Information shown in orange



1. **How to: Series of tasks leading to desired consequence**
2. **Kinds-of: Specific document or activity resulting from each task.**
3. **Kinds-of: Defining properties for each artifact.**
4. **Kinds-of: Ordering properties for each artifact.**
5. **How-to: Procedure for creating or selecting each artifact.**
6. **How-to: Example scenario for carrying out procedure.**

Instructional Strategy Components

The primary strategy components are:

Present (Tell) – Recall (Ask)

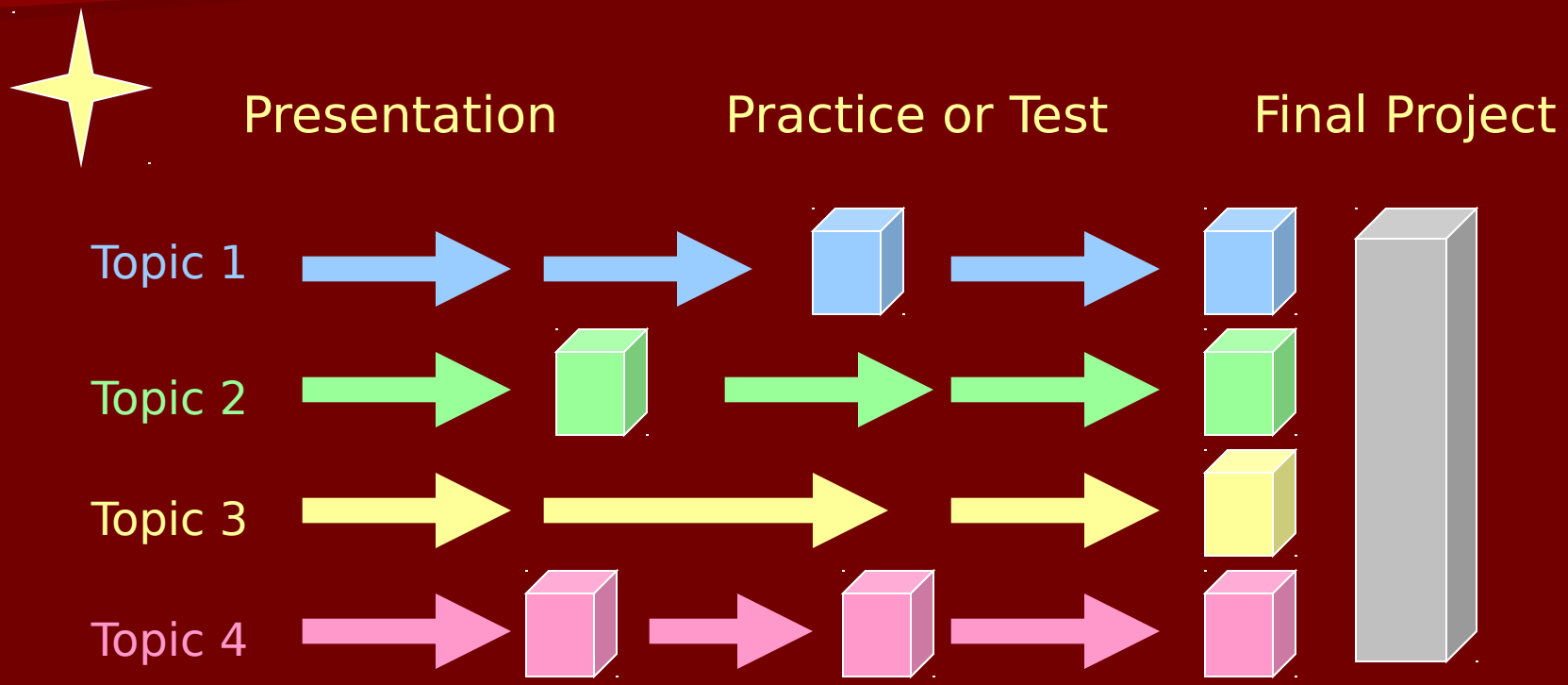
Demonstrate (Show)- Apply (Do)

The fundamental architecture of an instructional strategy is a combination of primary strategy components and knowledge components appropriate for, and consistent with, a given instructional goal.

Strategies for instructional outcomes

	Tell Information Presentation	Show Portrayal Demonstration	Remember (ask) Information Recall	Apply (do) info to portrayal Application
Information about	name - information	----------	Name information	----------
Parts of	name - location	----------	name - location	----------
Kinds of	definition	examples non-examples	definition	classify examples
How to	steps – sequence	demonstrate task	steps sequence	perform task
What happens	statement of conditions – consequence if… then	Demonstrate process	statement of conditions – Consequence If … then	Predict consequences or find conditions

Traditional Curriculum Sequence



Start Animation

Traditional Curriculum Example

Entrepreneurship

Topic 1 The nature of entrepreneurship

Topic 2 Business opportunities vs. business Ideas

Topic 3 Determining business concept and resource

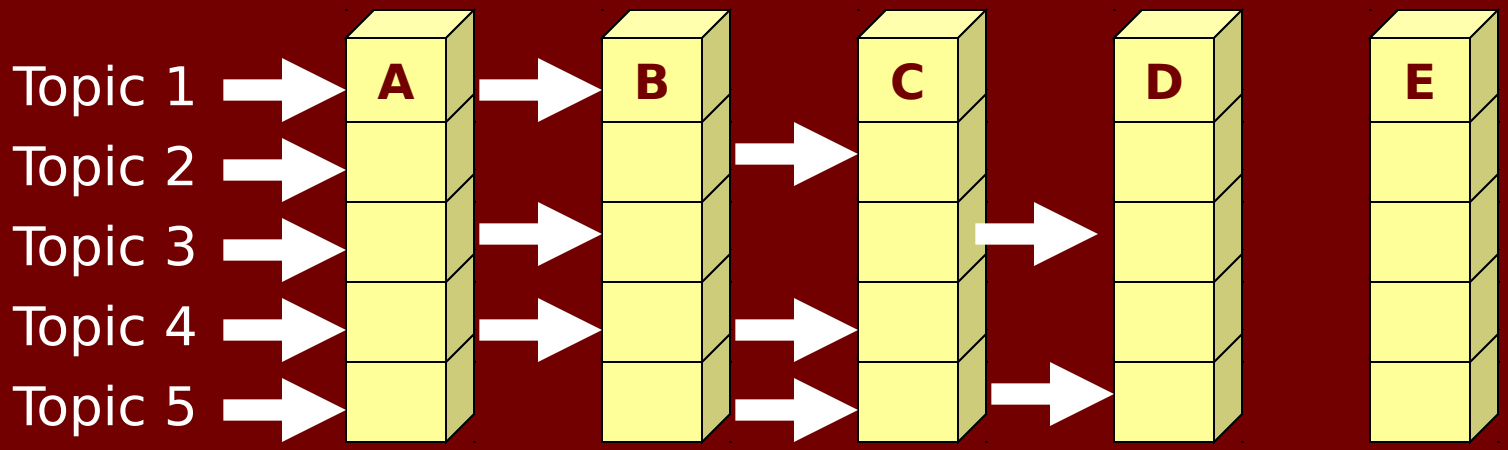
Topic 4 Acquiring the necessary resources

Topic 5 Implement and manage the business

Develop a business plan and start your own business

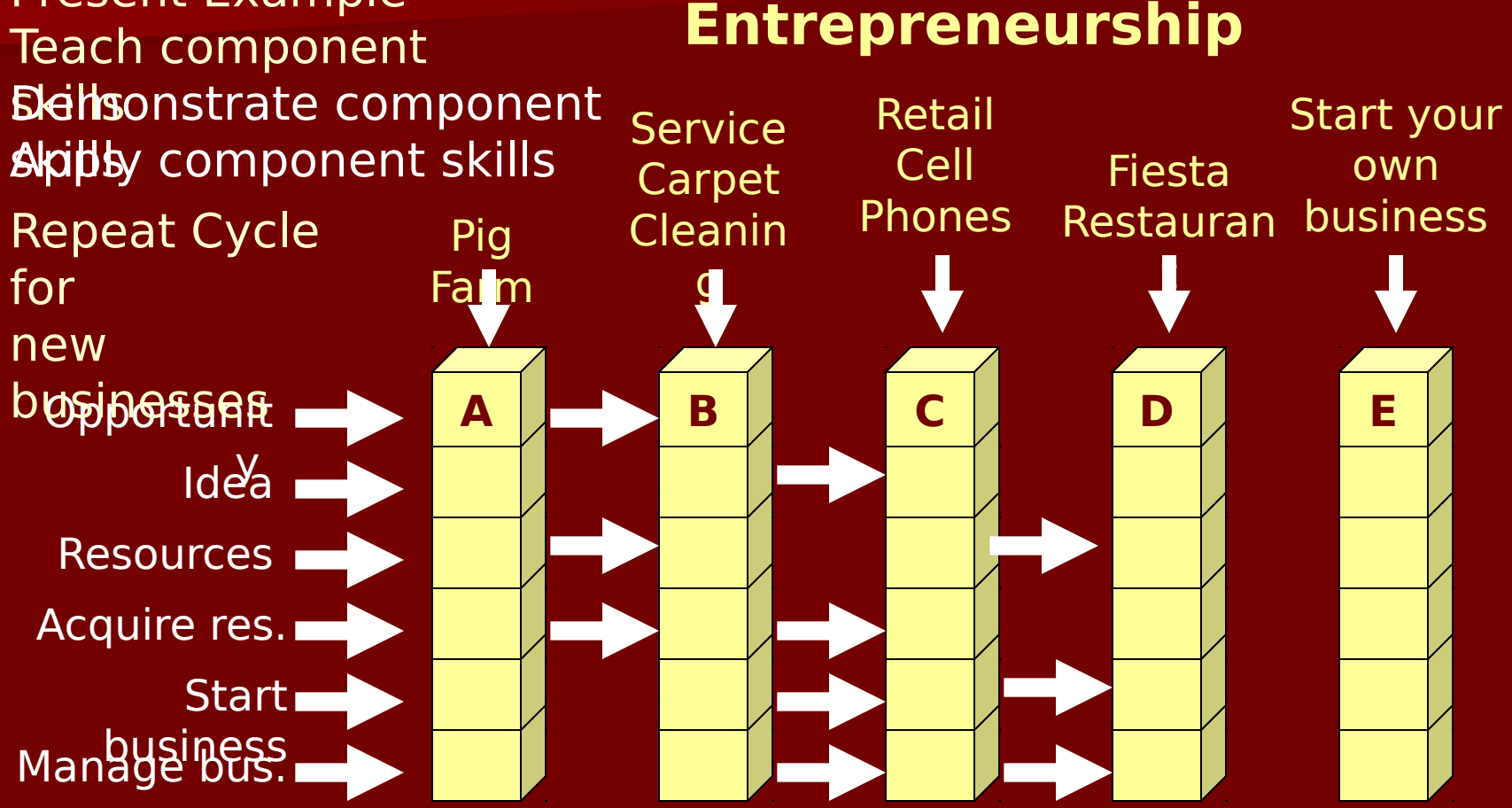
Task-Centered Instructional Strategy

- Show a new whole task
- **Student applies previous topic components to new task**
- Present topic components for new task
- Demonstrate application of topic components
- **Repeat apply, present, demonstrate cycle for subsequent tasks.**



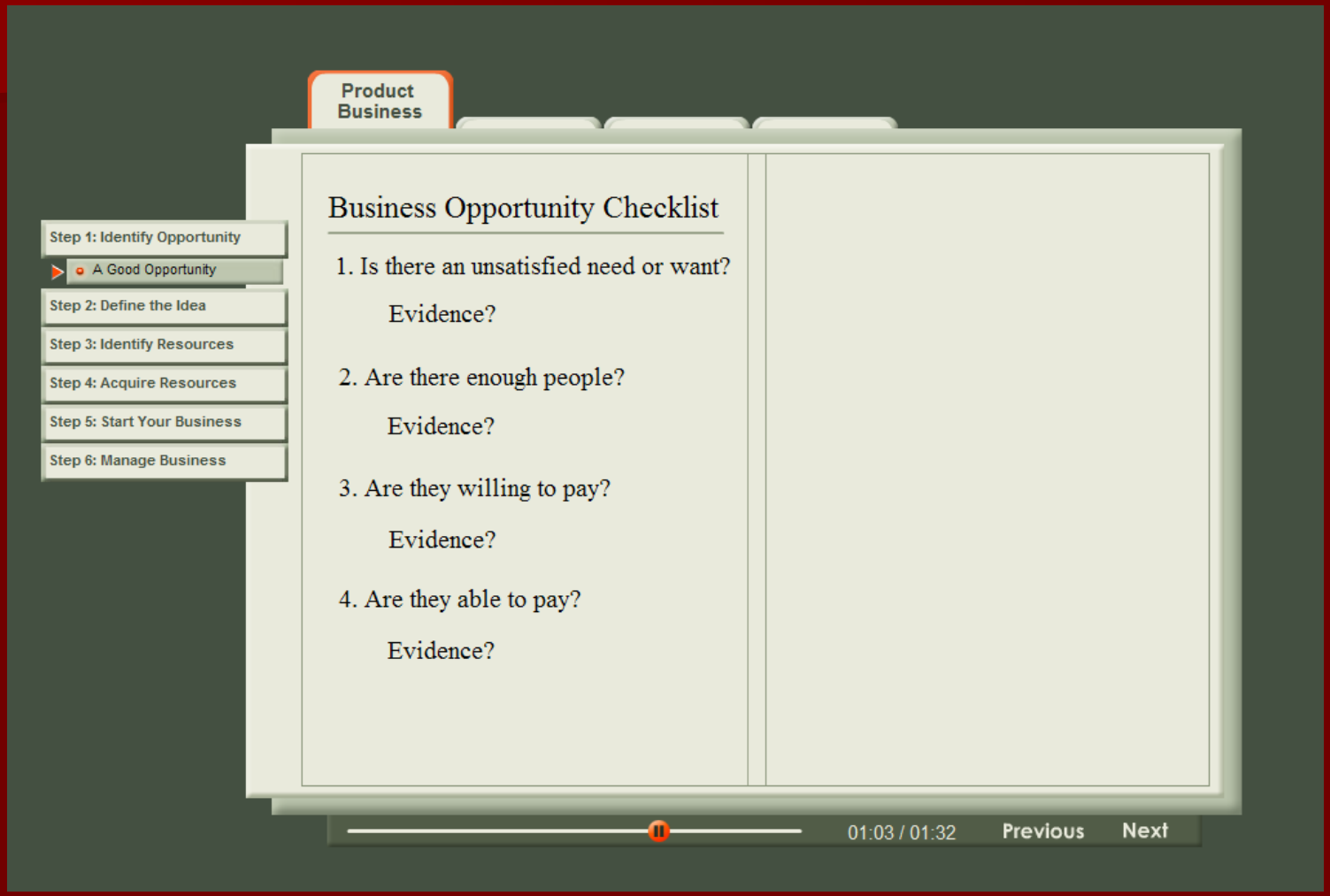
Task-Centered Instructional Strategy Example

Present Example
Teach component skills
Demonstrate component skills
Apply component skills
Repeat Cycle for new businesses

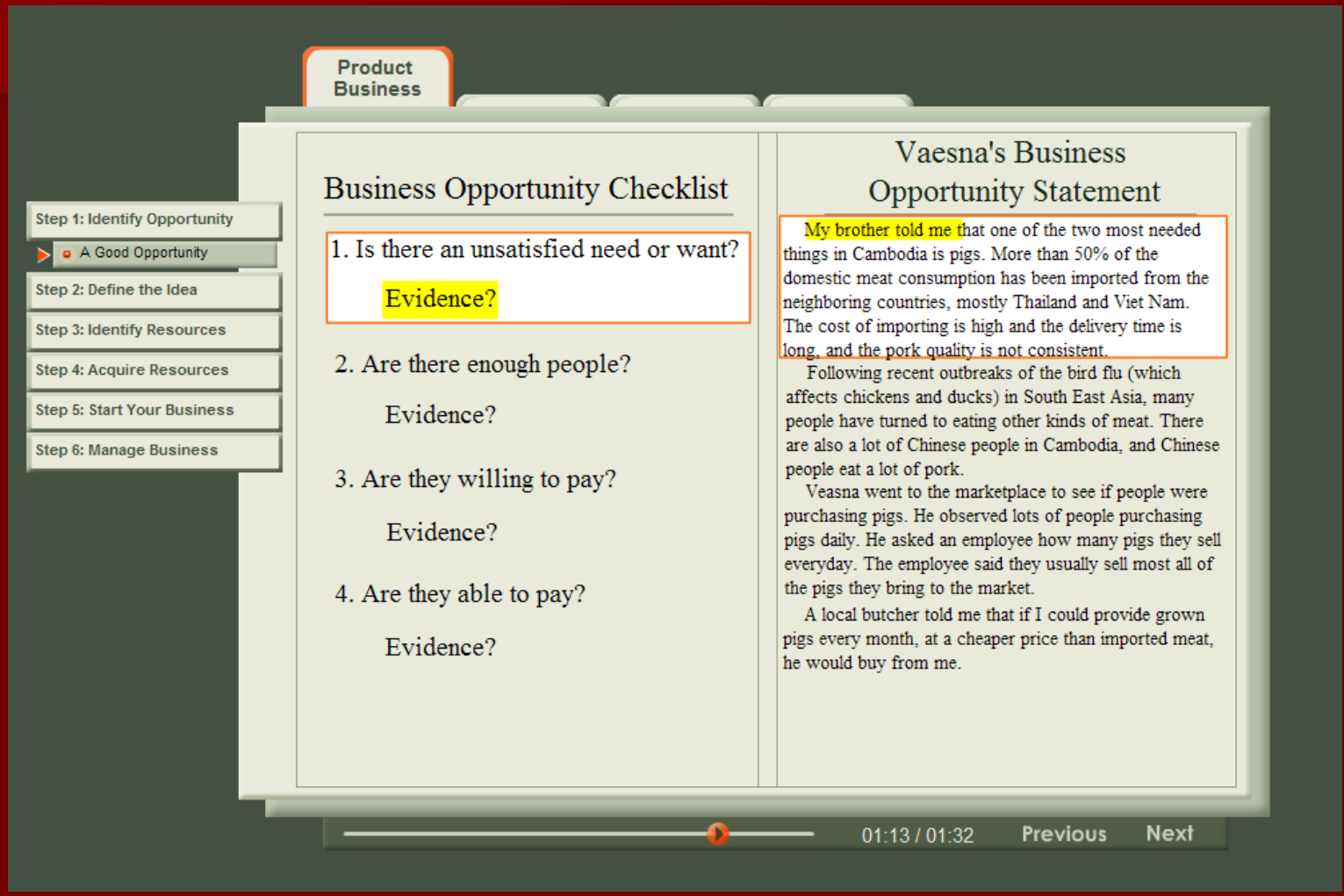


Present a task scenario.

Present the information

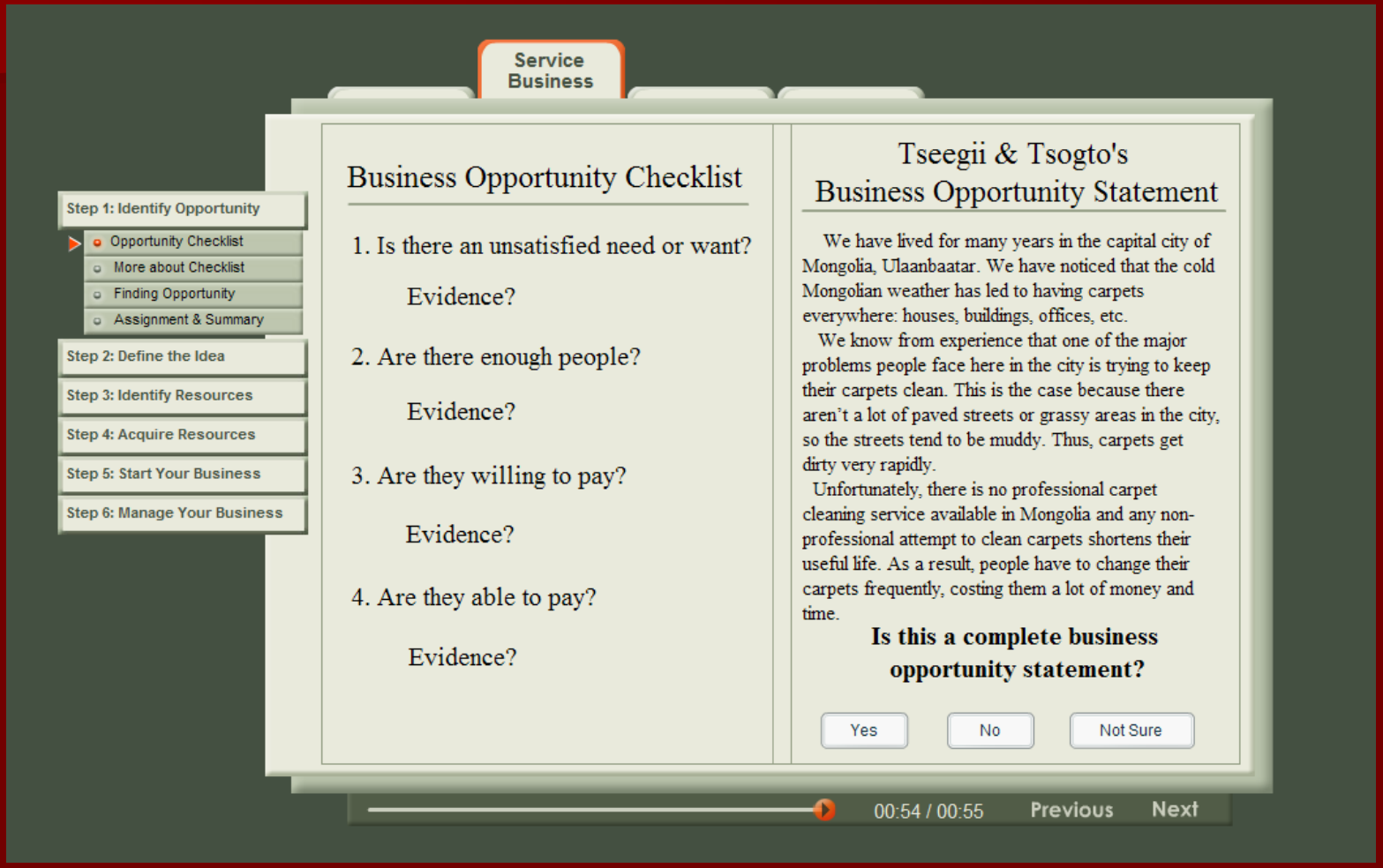


Demonstrate the information in the scenario.


Product
Business
Step 1: Identify Opportunity
A Good Opportunity
Step 2: Define the Idea
Step 3: Identify Resources
Step 4: Acquire Resources
Step 5: Start Your Business
Step 6: Manage Business
Business Opportunity Checklist
1. Is there an unsatisfied need or want?
Evidence?
2. Are there enough people?
Evidence?
3. Are they willing to pay?
Evidence?
4. Are they able to pay?
Evidence?
Vaesna's Business Opportunity Statement
My brother told me that one of the two most needed things in Cambodia is pigs. More than 50% of the domestic meat consumption has been imported from the neighboring countries, mostly Thailand and Viet Nam. The cost of importing is high and the delivery time is long, and the pork quality is not consistent.
Following recent outbreaks of the bird flu (which affects chickens and ducks) in South East Asia, many people have turned to eating other kinds of meat. There are also a lot of Chinese people in Cambodia, and Chinese people eat a lot of pork.
Veasna went to the marketplace to see if people were purchasing pigs. He observed lots of people purchasing pigs daily. He asked an employee how many pigs they sell everyday. The employee said they usually sell most all of the pigs they bring to the market.
A local butcher told me that if I could provide grown pigs every month, at a cheaper price than imported meat, he would buy from me.
01:13 / 01:32
Previous
Next

Present a new problem.

Have learners apply the information in a new scenario or problem.


Service Business
Step 1: Identify Opportunity
Opportunity Checklist
More about Checklist
Finding Opportunity
Assignment & Summary
Step 2: Define the Idea
Step 3: Identify Resources
Step 4: Acquire Resources
Step 5: Start Your Business
Step 6: Manage Your Business
Business Opportunity Checklist
1. Is there an unsatisfied need or want?
Evidence?
2. Are there enough people?
Evidence?
3. Are they willing to pay?
Evidence?
4. Are they able to pay?
Evidence?
Tseegii & Tsogto's Business Opportunity Statement
We have lived for many years in the capital city of Mongolia, Ulaanbaatar. We have noticed that the cold Mongolian weather has led to having carpets everywhere: houses, buildings, offices, etc.
We know from experience that one of the major problems people face here in the city is trying to keep their carpets clean. This is the case because there aren't a lot of paved streets or grassy areas in the city, so the streets tend to be muddy. Thus, carpets get dirty very rapidly.
Unfortunately, there is no professional carpet cleaning service available in Mongolia and any non-professional attempt to clean carpets shortens their useful life. As a result, people have to change their carpets frequently, costing them a lot of money and time.
Is this a complete business opportunity statement?
Yes
No
Not Sure
00:54 / 00:55
Previous
Next

Why is a task-centered strategy more effective?

- **Motivation – learners are motivated when they see immediate application for the skills they are learning.**
- **Context – learning is enhanced when information is attached to mental models for solving problems or performing tasks.**
- **Applicability – Students can more easily apply their new knowledge to real-world tasks.**

Entrepreneurship

You can review the current version of the course at the following URL:

http://cito.byuh.edu/entrepreneur/main.swf

Click on URL to go to this course on-line

Thank You

Ask me a question

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Resources

Click on the button or title to go to resource

First principles of Instruction

Knowledge Objects

Entrepreneurship Course (requires flash player on your computer)

Click here to download flash player

To view this presentation on-line click on the following hyperlinks:

http://cito.byuh.edu/merrill/Merrill_1/Merrill-1.html

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